

THE A.P.R.O. BULLETIN

The A.P.R.O. Bulletin is the official copyrighted publication of the Aerial Phenomena Research Organization Inc. (A.P.R.O.), 3910 E. Kleindale Rd., Tucson, Arizona 85712, and is issued every other month to members and subscribers. The Aerial Phenomena Research Organization Inc., a non-profit corporation established under the laws of the State of Arizona and a federally recognized scientific and educational tax-exempt organization, is dedicated to the eventual solution of the phenomenon of unidentified flying objects. Inquiries pertaining to membership and subscription may be made to the above address.

TUCSON, ARIZONA—JANUARY-FEBRUARY 1972

CLOSE-UP SIGHTING IN NEW JERSEY

Scandinavian Reports

Although there were many reports of UFOs over Scandinavia on New Years Day, 1972 we have selected just a few representative sightings which contain the most detail and were well-witnessed.

The first sighting of the day was reported by Gottfred Tande Petersen, a technician at NTH, Norway's largest technical school. Petersen was at home at 4:30 a.m. waiting for his son when he saw something moving toward Leirfossen, through a window. He arose, went to the window and observed a cigar-shaped object as it came to a stop and hovered. A large number of rectangular ports or windows located above the object's mid-line ran from the leading edge to the trailing edge and were brightly lit. He then went outside to get a better look.

Petersen had watched the object for three minutes before going outside and watched it for another two minutes after which blue flames issued from holes on the underside, a "low sound" was heard and the object began to move, the speed increasingly enormously and it disappeared from sight.

Petersen estimated the object to be 25-30 meters in length and 4 meters high. When it hovered it appeared to be about 2,000 meters above the power station at Nedre Lerfoss.

One half hour before Petersen's sighting, Gunnar Foss was driving between Hovin and Storen when he spotted two objects. He stopped his car and got out to better observe them, thinking he was watching a jet. They approached him at high speed, he said, and passed right above him and low over a hilltop. As they passed, he saw the shining trail they left and realized that there were several objects rather than just two.

At 4:15 that afternoon the personnel at the Bergen airport observed a formation of objects at 2,000 meters altitude. No other details were published.

On that same afternoon and also at 4:15 p.m., dozens of eye-witnesses in Norway and Sweden reported to authorities the observation of a formation of UFOs, the details of which were widely printed by the press.

(See Scandinavian-Page Three)

"Enquirer" Offers \$50,000 Reward

The March 12 issue of the weekly newspaper *The National Enquirer* announced their sponsorship of a \$50,000 reward to be paid to that individual who furnishes proof of the existence of UFOs before the 1st of January, 1973. The offer, detailed on Page 30 by William Dick, reads: "A reward of \$50,000 will be paid by *The Enquirer* to the first person who can prove that an Unidentified Flying Object (UFO) came from outer space and is not a natural phenomenon."

Mr. Dick visited Tucson in November when he attended the APRO UFO Symposium at the University of Arizona and talked extensively with Mr. Lorenzen and the Consultants who participated in the Symposium.

The Board who will do final judging of reports received by the *Enquirer* are Dr. Robert Creegan, APRO Consultant in Philosophy; Dr. James A. Harder, APRO Consultant in Civil Engineering; Dr. Frank B. Salisbury, APRO Consultant in Exobiology; Dr. R. Leo Sprinkle, APRO Consultant in Psychology; as well as Dr. J. Allen Hynek, Head of the Department of Astronomy at Northwestern University and former scientific consultant to the Air Force's Project Blue Book. These men, who have been deeply involved in UFO investigation for many years, are well qualified to perform the task.

APRO is acting as consultant on this project, and our Field Investigators may be called upon to investigate those reports which are deemed worthy of protracted study.

To this end, we urge all members and subscribers to the *Bulletin* to forward any news leads pertaining to possible good evidence reports to APRO Headquarters. We will be particularly interested in cases supported by photography, physical residue, ground markings and multiple witness reports of objects presenting structural details.

Keep in mind, however, that to qualify for the award you must make claim in writing directly to *The National Enquirer*, 600 South East Coast Ave., Lantana, Florida, 33460.

The following case was investigated by Mr. Hal Redner, one of APRO's New Jersey Field Investigators.

Robert Aguilar, 32, was on guard duty at the Penn Central yards in Weehauken, New Jersey on the evening of August 23rd, occupying a small 5x5 foot guard house that has large windows from waist level to ceiling and corner to corner. This post halts trucks entering and leaving the yards, and truckers present their papers to the guard on duty.

At 9:10 p.m. that evening, while watching a small portable television set, with truck driver Douglas Harrell parked at the shack about 5 feet from Aguilar (waiting for special papers caused Harrell to be parked there for several minutes prior to the sighting) Aguilar's attention was diverted from the TV to a bright series of lights stationary about twenty feet away and about 15 feet off the ground, almost directly in line with his viewing of the TV. He said he was "stunned" at the sight and for a few seconds he just stared at the lights, then pounded on the glass window and shouted to Harrell to look at the lights.

Harrell looked from the cab of his truck, saw enough to make him get out of the cab and step to the south side of the shack. Meantime, Aguilar stepped out of the shack to get a better look and was now able to see the "whole thing".

Aguilar's description of the object: "big—about sixty feet across—it hung motionless—absolutely motionless—about fifteen feet up—it has a red light on top—the rest didn't seem to have any color with a name, just white—the blocks of light were brighter than the rest of it—the blocks or windows or portholes or whatever they were, were stationary, they did not revolve—they were all the same color. I tried to see into the windows but they were too bright—I couldn't see the bottom, it was tilted—I must have watched it for a minute, then I thought of the Supervisors in the other office." (A trailer with two white collar type men who are locked inside the trailer to prevent any hijackers from walking in.)

As Aguilar ran to the trailer, looking back over his shoulder, he saw "the portholes begin to rotate, like a bicycle chain, going around the middle of the

(See Close-up-Page Three)

THE A.P.R.O. BULLETIN

Published by the
AERIAL PHENOMENA

RESEARCH ORGANIZATION, INC.

3910 E. Kleindale Road

Tucson, Arizona 85712

Phone: 602-793-1825 and 602-326-0059

Copyright 1972

Coral E. Lorenzen, Editor

Norman Duke, Richard Beal, Artists

A.P.R.O. STAFF

International Director L.J. Lorenzen
Assistant Director Richard Greenwell
Secretary-Treasurer Coral E. Lorenzen
Membership Secretary Madeleine H. Cooper
Administrative Assistant Robert D. Piccola

CONSULTANTS

Aeronautics Rayford R. Sanders, M.S.M.E.
Anatomy Kenneth V. Anderson, Ph.D.
Astronomy Leo V. Standeford, Ph.D.
Astrophysics Richard C. Henry, Ph.D.
Biochemistry Vladimir Stefanovich, Ph.D.
Biology Robert S. Mellor, Ph.D.
Biophysics John C. Munday, Ph.D.
Civil Engineering James A. Harder, Ph.D.
Computer Technology Vlastimil Vysin, Ph.D.
Electrical Engineering Kenneth Hessel, Ph.D.
Electrical Engineering Brian W. Johnson, Ph.D.
Electrical Engineering Lorin P. McRae, Ph.D.
Exobiology Frank B. Salisbury, Ph.D.
Geochemistry Harold H. Williams, Ph.D.
Geology Philip Seff, Ph.D.
History David M. Jacobs, M.S.
Linguistics P.M.H. Edwards, Ph.D.
Mathematics G.K. Ginnings, Ed.D.
Medicine Benjamin Sawyer, M.D.
Metallurgy Robert W. Johnson, Ph.D.
Metallurgy Walter W. Walker, Ph.D.
Oceanography Dale E. Brandon, Ph.D.
Optics B. Roy Frieden, Ph.D.
Philosophy Robert F. Creggan, Ph.D.
Philosophy Emerson W. Shideler, Ph.D.
Physics Michael J. Duggin, Ph.D.
Physics Rene J. Hardy, Ph.D.
Physiology Harold A. Cahn, Ph.D.
Psychiatry L. Gerald Laufer, M.D.
Psychiatry Berthold E. Schwarz, M.D.
Psychology R. Leo Sprinkle, Ph.D.
Radiation Physics Horace C. Dudley, Ph.D.
Religion Robert S. Ellwood, Ph.D.
Science Education A. Henry Swann, Ed.D.
Seismology John S. Derr, Ph.D.
Zoology Richard Etheridge, Ph.D.

REPRESENTATIVES

Argentina Guillermo Gainza Paz
Australia Peter E. Norris
Belgium Edgar Simons
Bolivia Fernando Hinojosa V.
Brazil Prof. Flavio Pereira
Britain Anthony R. Pace
Ceylon K.P.K. De Abrew
Chile Pablo Petrowitsch S.
Colombia John Simhon
Costa Rica Rodolfo Acosta S.
Cuba Oscar Reyes
Czechoslovakia Jan Bartos
Denmark Erling Jensen
Dominican Republic Guarionex Flores L.
Ecuador Col. Raul Gonzalez A.
Finland Kalevi Hietanen
France Richard Niemtzow
Gambia Robert A. Connors
Germany Capt. William B. Nash
Greece George N. Balanos
Guatemala Eduardo Mendoza P.
Holland W.B. van den Berg
Ireland Martin Feeney
Italy Roberto Pinotti
Japan Jun'ichi Takanashi
Lebanon Menthir El Khatib
Malta Michael A. Saliba
Mexico Roberto Martin
New Guinea Rev. N.C.G. Crutwell
New Zealand Norman W. Alfrod
Norway Richard Farrow
Paraguay Col. Raul Gonzalez A.
Peru Joaquin Vargas F.
Philippine Republic Col. Aderito A. de Leon
Puerto Rico Sebastian Robiou L.
Rumania Tiberius A. Topor
Sierra Leone Bernard J. Dodge
Singapore Yip Mien Chun
South Africa Frank D. Morton
Spain Antonio Aparicio D.
Sweden K. Gosta Rehn
Switzerland Dr. Peter Creola
Taiwan Joseph March
Tasmania William K. Roberts
Thailand Donald A. Rode
Trinidad Eurico Jardim
Uruguay Walter Fernandez L.
Venezuela Askold Ladonko
Vietnam Terry R. Payton

APRO Begins 21st Year — A Progress Report

January 1, 1972, marked APRO's entry into its 21st year of existence. As the date approached, several members of long standing including charter members pointed out some of APRO's accomplishments which may be of interest to the membership.

APRO was the first UFO research organization in the world. At least one other group claims that distinction but was more on the order of a discussion group rather than dedicated to research and regular publication of reports. There may have been other groups in existence around the time APRO was organized but they consisted of "paper" organizations (existing mainly on paper rather than as viable groups).

APRO has to date, produced 120 periodicals (*The APRO Bulletin*), there being only one gap in the publication record in 1954 when one issue was consolidated with another due to pressure of work and a sighting workload.

APRO was the first organization to depart from the philosophy that harassing the Air Force would bring some answers and action, and to embark upon an effort to interest the scientific community and conduct actual research. We were also first to recognize the Air Force Project Blue Book for what it was — a public relations effort.

When APRO incorporated in 1967 it was the first UFO organization to do so and shortly thereafter obtained its tax-exempt status — also a first in the field.

In 1957 APRO instituted the Representative system when the late Dr. Olavo T. Fontes joined APRO as the Representative for Brazil. Shortly thereafter APRO began to recruit scientists for its panel of Consultants. The Field Investigator Network followed, making APRO the most effective UFO research organization in existence.

In summing up, APRO has been an innovative organization employing original ideas and never remaining static. We fully expect our COMCAT project (another first, incidentally) to be another landmark in UFO research.

Imitation is supposed to be the sincerest form of flattery and the number of groups who have emulated APRO through the years, even to the extent of employing the same terminology and organizational formats are too numerous to mention but are an indication of the workability of APRO's policies.

Mr. and Mrs. Lorenzen, Mr. Greenwell and Mrs. Cooper would like to extend their thanks to the members, Field Investigators, Consultants and Representatives who have so consistently supported the organization's efforts. We all look

forward to further successes in the year 1972 which was predicted to be the heaviest period of UFO activity in the history of UFO research by Dr. Olavo T. Fontes in 1965. If the number of reports reaching this office at the present time are any indication, 1972 will certainly yield considerable information and perhaps some long-sought answers.

Staff Members In Texas

Mr. James Lorenzen, APRO Director, and Mr. Richard Greenwell, APRO Assistant Director, delivered presentations at a UFO seminar held on February 4th., 1972, at the Ruth Taylor Hall of Trinity University in San Antonio, Texas.

Mr. Lorenzen and Mr. Greenwell's talks were well received, as well as that of Mr. Ray Stanford, who organized the seminar and delivered a photographic presentation. Mr. Lorenzen talked on U.S. Government policy toward UFOs and Mr. Greenwell on scientific questions related to UFO phenomena. Various radio, TV and press interviews took place.

The next day, Mr. Lorenzen flew back to Tucson and Mr. Greenwell continued on to Houston and Dallas where he visited Dr. Dale E. Brandon, APRO Consultant in Oceanography. Dr. Brandon agreed to join with other Consultants in analyzing some special UFO reports. His main interest in UFOs lies with marine cases.

In Dallas, Mr. Greenwell met with Dr. Brian W. Johnson, who is now a Consultant in Electrical Engineering (see other article in this issue). Dr. Johnson, who does research in the Physics Department at the University of Texas at Dallas, has particular interest in instrumentation design for UFO detection, and has built a prototype of one detection system. Mr. Greenwell also appeared on a 30 minute UFO special at Texas A. & M. University's KAMU-TV station on February 10th.

Two New Consultants

Two members, Mr. David M. Jacobs and Dr. Brian W. Johnson, have become Consultants to APRO in History and Electrical Engineering respectively.

Mr. Jacobs received a B.A. in History from the University of California, Los Angeles, in 1966 and an M.A. in History from the University of Wisconsin, Madison, in 1968. He is now a Ph.D. candidate in History at the University of Wisconsin and should graduate in 1972. His field of specialty is the social, cultural and intellectual history of the United States. His doctoral thesis is titled *The Controversy Over Unidentified Flying Objects in America: 1896-1970*, which is a discussion of the historical, cultural and

(See Consultants-Page Three)

Close-up*(Continued from Page One)*

thing." Aguilar thinks the thing began to slowly move to the south and climb slightly as he went to the trailer. However, his running and subsequent pounding and shouting at the trailer door interfered with his observations.

The supervisors came outside of the trailer after some short unknown length of time (they had been derisive about his shouts about "flying saucer") and when next Aguilar and the two supervisors looked, the object had moved to a point estimated by Aguilar as 100 feet away and possibly one hundred feet off the ground. The object, still tilted, now had the rotating lights moving rapidly. Aguilar said that if he had not seen the "port-holes" stationary at first he would not have been able to notice that the belt of lights was not solid—that is, not continuous.

The group watched the object seem to accelerate and climb to the south, dwindle to a point, seem to arc around to the east and return toward the group (still far enough away so that no details of the object were seen), come to a hesitation over the river (now quite high) and suddenly dart off to the east. This part of the sighting lasted all of five to ten seconds.

The sky was very clear, the moon was visible, no sound accompanied the object and it apparently had no effect on the television. No pain, heat or wind felt.

Aguilar told his wife of his sighting when he arrived home that night and called the Jersey City Police and the *Jersey City Journal*, where he reported his sighting. Aguilar had taken so much kidding and criticism from his friends and relatives that he was happy to be contacted by Mr. Redner.

Scandinavian*(Continued from Page One)*

Captain Oddmund Karlsson, pilot of a vacation charter jet was preparing for a landing at Bergen, Norway when he spotted a formation of seven white glowing objects at approximately 20,000 meters altitude (about 70,000 feet). Karlsson pointed them out to his co-pilot and later stated that some of his 124 passengers viewed the objects also. They were flying in echelon formation, he said, and the four objects at the head of the formation were the brightest.

Hakan Berklund and Anders Hedberg of the village of Sveg in middle Sweden also sighted the same or a similar formation but said the objects slowed their speed and after a low-level flight over the village, increased speed and altitude and sped out of sight.

Forestry worker Lennard Jonsson claimed he watched the formation for

three minutes over Lembackern in the province of Varmland, also in middle Sweden. Other reports came from Stockholm, Eskilstuna, Gavle and Osthhammar and witnesses called the police and the Army to report the sightings.

The Swedish Air Force stated that neither NATO in Norway or the Swedish Defense Department registered any radar returns of UFOs during the sightings. However, Major Erling Hornven of the Norwegian High Command said: "We have approximately 20 reports with descriptions absolutely worthy of belief." He said that most of the reports described seven brightly glowing round objects which moved very fast from Northwest to Southeast. Hornven also stated that "it was unlikely that it could have been an airplane or a returning satellite."

Eyewitnesses estimated the speed of the objects as 4800 kilometers per hour—much faster than the speed of any earthly airplane. However, Tage Eriksson of the Swedish Research Institute for Defense thought that "mirages, reflections, an airplane or a swarm of meteorites could have produced the light appearances."

Inasmuch as the Karlsson sighting and the Bergen airport sighting took place at the same time, it is quite possible that they were one and the same formation but that writers misquoted altitudes.

Consultants*(Continued from Page Two)*

psychological aspects.

Besides having been a Teaching Assistant at the University of Wisconsin's History Department, Mr. Jacobs has received various scholarships, including a Ford Foundation Research Fellowship. He is a member of the Organization of American Historians. As described elsewhere in this issue, Mr. Jacobs is one of four graduate students who have utilized the UFO subject as a basis for a dissertation. His studies on social interactions in the history of UFO sightings will be an asset to APRO in the future.

Dr. Johnson received both a B.S. and an M.S. in Electrical Engineering from Carnegie-Mellon University in 1967 and 1968 respectively. His Ph.D. in Space Science (Plasma Physics) was obtained from the same institution in 1971. He was formerly a Research Engineer in the Research and Development Laboratories of Westinghouse Electric Corporation and is currently a Research Associate in the Division of Atmospheric and Space Sciences of The University of Texas at Dallas. His work involves research on atomic helium, lasers and excited gas afterglows.

One of Dr. Johnson's main interests in UFOs is detection systems. He has been involved in instrumentation systems

design and has constructed various sophisticated "detectors" — which will be discussed in a future article of his in *The APRO Bulletin*.

Project Comcat

As of February 15, APRO's Project COMCAT (Computerized Catalog of UFO reports) went into preliminary operation. A sizable donation by an APRO member has provided the financial means by which APRO has hired additional office personnel so that efforts can be concentrated on micro-filming the report files. The files will be filmed in duplicate, one copy of the film to go to a librarian for cross-referencing and the other to a team of computer specialists who will transfer the information to punch cards.

As the filming is done, specific reports will be pulled, copied and forwarded to the appropriate Consultant. We expect that these efforts will yield positive results with the next three months.

We would like to urge those who have reports which have not been submitted to APRO to forward same at the earliest possible opportunity so that they can be included in this important study.

New APRO Staff Member

APRO announces the hiring of a new staff member, Mr. Robert D. Piccola, as an Administrative Assistant. Mr. Piccola, who commenced his full-time duties at the Alvernon Way APRO office on February 21, 1972, was born in Louisville, Kentucky on May 30, 1946.

Mr. Piccola attended the University of Alabama at Tuscaloosa and studied Business Administration and Marketing (1965) and transferred to Eastern Kentucky University at Richmond (1966). He is experienced in all forms of office procedures, banking and credits, as well as sanitation engineering problems and environmental pollutions. Concerning UFOs, Mr. Piccola believes that they represent "a subject worthy of serious, scientific attention and that society will ultimately benefit through the dissemination of such information." Mr. Piccola observed a disk-shaped, silver-metallic UFO in August, 1958, which left no vapor trail and made no noise.

ADDRESS CHANGES

Always include old and new
Zip Codes.

Brazilian Photo Case

Mrs. Irene Granchi, APRO's Field Investigator at Rio de Janeiro, Brazil has forwarded the details of a multiple-witness UFO sighting which took place on October 1, 1971 at 7:50 p. m. in the Sao Cristovao district of Rio. One of the main witnesses, Mr. Nelson Calmon Schubsky, managed to get two photos of the object, which are presented on this page.

Two young girl students sounded the alarm from the street, whereupon Mr. Schubsky, 24, and his fiancée, Sheyla Fernandes Cardoso, 21, rushed into the street to see the object. There was quite a gathering of witnesses by the time they got outside. Except to open the diaphragm of the camera to the maximum, Schubsky had no time to adjust the camera. The object, which sported three lights (white, yellow and red), was maneuvering in the vicinity of the Helena Rubenstein beauty products factory. The body of the object was described as rose-colored at its center with its outline a true red. It pulsed rapidly and when the light became dim the color of the object was rose.

At its nearest point the object appeared to have three small craters or holes on its underside. The three lights described previously jetted down from the body of the object toward the ground but did not reach the ground. The light of the body of the object was described as opaque and diffused, and compared to that of a red-hot piece of iron.

The object finally went behind the chimney of the Rubenstein factory and was not seen again. Witnesses living on the other side of the factory said they had seen a red glow but nothing else. The sighting was generally considered to have lasted approximately 5 minutes but no one bothered to time it so it is just an estimate. Mr. Schubsky was using a Leica Model IIIIf, black and white film.

Treacher Reveals Sighting Details

While in Palm Beach, Florida in early December, 1971, Mr. and Mrs. Lorenzen discovered that Arthur Treacher, the famous English actor and former "side-kick" on the Merv Griffen late night talk show, was staying in an adjacent unit at the Holiday Inn. Mrs. Lorenzen recalled that Mr. Treacher had mentioned that he had made a UFO sighting during a discussion of the subject on the Griffen show. Mr. and Mrs. Lorenzen approached Mr. Treacher while he and his wife were lunching on the patio and obtained these details:

The Treachers do not recall the exact year of their sighting, but said that it took place "8 to 10 years ago", which



RIO PHOTO NO. 1

would place the approximate year sometime between 1961 and 1964. They did recall that the month involved was August and the time between 6:30 and 7:00 p. m.

The couple were at the Dune Deck Hotel at West Hampton Beach, Long Island when they looked toward Montauk Point and spotted the tadpole-shaped object coming toward them. The object was grey-colored (like cement) and had a red light which resembled exhaust at the trailing edge. Its apparent size was 5/8 inch at arm's length. Mr. Treacher said that the object's flight path indicated that it came toward them, circling the people in the area as if observing them, whereupon it left in the same direction it had come from. Mr. Treacher felt that the object was within rifle range and that if he had had a rifle at the time he could have shot and struck the object.

The duration of the sighting was estimated to be between 5 and 6 minutes and Mr. Treacher felt many others must have observed it also.

Car Buzzed In Norway

Miss Karen Marie Smerud, 22, of Jevnaker and her uncle were driving about 9 kilometers north of Jevnaker Center on August 25, 1971 when they spotted an unusual appearing reddish light in the sky which they first thought was a fire in the distance. They soon discovered, however, that it was a reddish ball, as it rushed toward them. As it neared them the object gave the appearance of a red sun with rays of light sticking out around the edges. Miss Smerud stopped the car and the light then began circling them.

Thoroughly terrified, Miss Smerud backed the car to the nearest house where she knocked on the door. When the lady opened it, though, the object had ascended to a higher altitude where it hovered. However, the woman could still see the ball of red light and she followed Miss Smerud and her uncle in her car and all three observed the object for about 45 minutes before it disappeared from sight.

Press Reports

Although there are many news reports in our hands pertaining to UFO reports around the world, it appears that the UFO's made a special project of Brazil in December and January. Therefore we will devote this column to Brazilian press items.

On the evening of the 19th of December, 1971, an object described as "enveloped in a mist" was observed by several people at Gravatai. A young man and his girl friend were on the beach at Praia de Assuncao when they observed an object emerging from the water and coming towards them. Frightened, they rushed away but saw the object take off—soundlessly.

Also on the 19th, a disc-like object described as a "great medal" was seen by Dona Maria Jose Aguiar and two girls as they left the local chapel at Campos, state of Rio de Janeiro.

December 19th was the date of another sighting there, when the owner of the Hotel Meirelles was on the veranda with his family and was one of many who viewed an object which looked like a huge moon swinging from side to side and up and down above a hill at 8 p. m. Some

(See Press-Page Five)



RIO PHOTO NO. 2

Press

(Continued from Page Four)

witnesses panicked, others fled and others were paralyzed with fear.

On the same night a man on his way to Itaperuna from Natividade panicked when a disc "danced" over his car. When he and his wife arrived in Itaperuna, she was in hysterics.

On the 20th of December the Niteroi-Natividade bus stopped at Itaperuna and all passengers were very upset for a UFO had followed the bus for several kilometers, flying low over the hood. They refused to continue their journey that night and stayed in Itaperuna.

At 9:10 a. m. on the 1st of January a luminous object about the size of a bicycle was seen by at least 50 people in Salvador (Bahia). A small boy first spotted it (it seemed as though it was going to land), called his playmates, and a reporter from the newspaper "A Tarde" came along and saw it also.

In the "Letters from the Readers" column for January 5, a reader wrote: "An identical case to that of the flying disc seen in Itaperuna on December 19th, at 8 p. m., occurred here in Ipiabas on the same day, at about 9:30 p. m. A rounded, luminous object appeared motionless above a hill by my home, at about 20 metres from the ground, emitting a bright jet of bluish light on a field in front, so that an employee of mine was frightened by it and ran over to call me. The object was still motionless in the sky over the hill. Then I saw it emit a bright jet of light sideways, twice. Then it moved on slowly and stopped again over the garden of my house where I found myself standing with my children and other persons. At one time it looked as if it was going to land. It stayed where it was for about five minutes, enveloped in a kind of luminous or phosphorescent cloud; then it retreated and started gaining height until it finally disappeared toward the Forest Farm, towards Valenca."

Swedish Photo Judged Authentic

Mr. K. Gosta Rehn, APRO Representative for Sweden, has forwarded the photo shown above as well as the following report:

On May 6th, 1971, at 9:55 a. m. Lars Thorn, 25, a truck driver, snapped two photos of an unconventional aerial object which he caught sight of between some trees and an old bunker while riding on his motor bike in the neighborhood of the Skillingaryd gunnery field in Middle Sweden. The camera was a Minolta (Japanese). The second photo came out more clearly than the first and was enlarged by



120 times. The photo shown above is the clearest of the two.

"Although it was stationary", Lars Thorn said, "it wobbled or rocked to and fro all the time. On the upper side there appeared to be a dome (it shows faintly on the photograph because the UFO was turned over showing mostly the rim and the bottom). Just below the dome there was something grey and red and again, below that, I could see what looked like a green ribbon. The very bottom was red. There came from it a whizzing sound at intervals of 10-15 seconds."

GICOFF, the Goteborg UFO research group interviewed Thorn in depth and two trusted professional photographers examined the photos. They put the two negatives one upon the other, matching the images and shining light through them. They also looked at them through a stereoscope to get the effect of depth. This eliminated the possibility of reflections and showed that the object hovered far on the other side of the bunker from Thorn's position.

A photo laboratory of the A-kopia firm magnified the negatives 120 times and irradiated them with laser light. The quality of the granulation was found to be evenly sized and uniformly distributed all over the film, on the object as well as on the background. Several dark copies were made to find out if the object had been suspended with a thread or wire. These tests showed conclusively that a possible montage or hoax were precluded. The photographs were declared *genuine*.

The largest photo laboratory in Goteborg, the Kodak Company, also examined the photographs. The men in charge declared unanimously that the photos show no trace of a montage and that they are genuine. They would not venture a guess as to what the object actually was.

UFO Researcher Boris Jungkvist took the photos to the FOA, (Swedish Defense



Research Institute) which has in the past exhibited a hostile attitude toward the UFO problem. Dr. Yage Eriksson, the scientist in charge and photo expert S. Larsson first suggested that the picture represented a fabricated model. They suggested that a light balsa wood and paper model could be constructed with a hot air balloon inside it to hold it up in the air. No evidence of a montage was found. Larsson examined the negatives through a magnifying glass and thought he could see a straight, thin, grey-black line running from the ground up to the saucer — thus an anchored balloon contraption was insinuated. Further examination showed that no such line existed.

After considerable discussion, Jungkvist was surprised to hear Dr. Eriksson announce: "Well, then this thing here is a flying saucer, I suppose, but what are we going to do about it?" FOA kept the material for further investigation.

Other details relating to the photograph: The sun appears to reflect off the rim of the object in the photo. A lattice or grate is apparent below the rim. The object was first seen at about 15 degrees above the horizon, traveling at about the speed of a small plane, whereupon it reached its position near the bunker, hovered momentarily (while Thorn took the photographs), then went back in the direction it had come, at the speed of a jet plane and disappeared from sight. Thorn estimated that the object was about 300 meters (1000 feet) from him and about 10 meters in diameter. The rocking motion gave him an opportunity to see that it was disc-shaped.

Object Filmed In England

A television film crew on location at Enstone, England on October 26, observed (See England-Page Six)

England

(Continued from Page Five)

served and photographed a UFO which was later shown to 8 million viewers on an Associated Television News Program.

The film is allegedly in the hands of the British Ministry of Defense where it is being studied. It is quite likely that this particular film is one of the most convincing pieces of evidence to come to light as it involves a bright round object which is approaching the camera, then makes an abrupt 90-degree turn without slowing down. After the turn the object streaked across the sky leaving a vapor trail. It was observed visually by the six-member film crew including cameraman Noel Smart who did the actual filming, and Christine Fewlass.

Smart said that his crew was filming a documentary about farming in a field at Enstone when he spotted the object which he described as round and glowing and it appeared to be spinning. He didn't begin filming immediately, he said, because he was busy watching the object which was coming toward the group. Then it stopped, he said, and hung motionless for approximately 15 seconds, whereupon Smart grabbed his camera. The object then began to move toward Smart and took on an orange glow. He said that by the time he got the camera working the UFO was moving at very high speed. It was at this point that the object made the 90-degree turn, speeding up, and Smart had difficulty following it with his camera.

Miss Fewlass said that in her opinion the object was not an aircraft because of its shape, speed and maneuvers. She also said that as a member of a film crew for four years, she had filmed many aircraft but that the object was nothing like anything she had ever seen.

USAF Report On Hill Case

APRO recently obtained a copy of the official United States Air Force UFO report on the Barney and Betty Hill case, which includes a radar track report on a UFO by the Air Force itself.

The report concludes that "both radar and visual sighting (by the Hills) are probably due to conditions resulting from strong inversion which prevailed in (the) area on (the) morning of sighting . . . radar was probably looking at some ground target due to strong inversion. No evidence indicating objects were due to other than natural causes." A fairly accurate description of the object, as reported by the Hills in John Fuller's *Interrupted Journey*, is given and it is admitted that all the information was obtained through a telephone conversation. The Hills were not interviewed

although the report stated that "... his (Hill's) apparent honesty and seriousness appears to be valid. . ."

The Air Intelligence Information Report 100-1-61, submitted by the 100th Bomb Wing (SAC) at Pease AFB, New Hampshire, to the Air Technical Intelligence Center (ATIC) at Wright-Patterson AFB, Dayton, Ohio, and signed by Major Paul W. Henderson, has an "additional item" as follows:

During a casual conversation on 22 Sept 61 between Major Gardiner B. Reynolds, 100th B W DCOI and Captain Robert O. Daughaday, Commander 1917-2 AACS DIT, Pease AFB, NH it was revealed that a strange incident occurred at 0614 local on 20 Sept. No importance was attached to the incident at the time. Subsequent interrogation failed to bring out any information in addition to the extract of the "Daily Report of the Controller". Copy of this extract is attached. It is not possible to determine any relationship between these two observations, as the radar observation provides no description. Time and distance between the events could hint of a possible relationship.

The radar report — labelled "True Extract of Daily Report of the Controller, AACS Form 96, for the date of 20 September 1961" — reads as follows:

0614 OBSERVED UNIDENTIFIED
A/C COME ON PAR 4 MILES OUT.
A/C MADE APPROACH AND
PULLED UP AT 1/2 MILE. SHORTLY
AFTER OBSERVED WEAK
TARGET ON DOWNWIND, THEN
RADAR CTC LOST. TWR WAS
ADVISED OF THE A/C WHEN IT
WAS ON FINAL, THEN WHEN IT
MADE LOW APPROACH. TWR
UNABLE TO SEE ANY A/C AT
ANY TIME . . . JC

CERTIFIED TRUE:

(signed) Robert O. Daughaday Captain, USAF Commander

Full wordage of abbreviations follows for APRO readers: AACS = Airways and Air Communications Service; A/C = Aircraft; PAR = Precision Approach Radar; CTC = Contact; TWR = Tower.

Although Major Henderson seemed impressed by the Hill observation, the sighting is explained away as a possible "advertising search light." However, the official explanation was originally "Optical Conditions" which was later changed to "Insufficient Data for Evaluation." The radar track is also explained away as

an "... observation due to unusual optical condition resulting from atmospheric conditions."

On The Brazilian Scene

A series of sightings took place in Brazil in December, 1971 which were reported to Irene Granchi, APRO's Field Investigator in Rio de Janeiro.

At 8 p. m. on December 19, 1971 at Pipeiras, which is about 20 kilometers from Barcelos, an object was seen in the south, low on the horizon, larger than a half moon, traveling horizontally, soundless and heading north. When it reached a spot over the witnesses' heads, it looked like a wheel, with a dark center and a central light described as "dull", reddish and dimly glowing. Many people stood outside and watched the spectacle. Later that evening an object answering the same description was seen by many at Palacete, Fazendinha, Roca Velha and Barcelos.

At about 10 p. m. several witnesses at different locations including Roca Velha, saw an object ejecting a tiny, star-shaped object, then 3 or 4 more and the third time, a "whole lot" of "little stars". The "stars" either flew out of sight or extinguished their lights, except for two which moved south and descended as if landing.

On December 28, at Atafona, a very strange series of events transpired. The witnesses were aeronautical engineer Heleno C. Cordeiro de Mello, his wife Helen and Mrs. An' Augusta Rodriguez. All are well-known and respected individuals in the community. They were sitting on the veranda when a luminous spot came from the south and traveled north, with an undulating trajectory. It passed out of sight in the north four minutes after it was sighted and was estimated to be at approximately 900 feet altitude and traveling at about 400 miles per hour.

Twelve minutes later a similar luminous spot came out of the west traveling in a curve toward the North, at the same approximate altitude as the first, and the same apparent speed, going out of sight within four minutes. It appeared elliptical in shape with a central lighted portion.

Again, 12 minutes later, another spot came out of the west, following the same path as the 12:12 a. m. object, only it seemed to be closer. As with the 12:12 a.m. object, it appeared elliptical but without a central light.

A little to the south of the area where the 2nd and 3rd object were seen, a little nebulous mass was seen and all during the observation there seemed to be a flash emitted from this mass.

The final manifestation in the December sightings took place on December 29 at Atafona. Witnesses were the same as the December 28 sighting plus three

(See Brazilian-Page Seven)

Brazilian

(Continued from Page Six)

children (3, 10 and 11 years old) and a young man and two girls who work at the household.

It was 8:30 a. m., the sky was blue, the sun shining brightly, and there were some high cirrus clouds, and a slight wind from the north.

The children called the adults to come out and see a strange mushroom-shaped cloud. Upon going outside the adults noted that the object was at the same spot where the nebulous mass was seen the night before. It was clearly visible, near and lying low, much lower than the clouds.

The "cloud" was strange because of its color—a reddish-brown. It also appeared foam-like or like thick smoke "half bubbly"—as if produced by little explosions. It also kept changing shape and traveling against the wind.

Suddenly the cloud broke up into tiny fragments, compact flakes that spread out, then came together, repeating this process many times and each time the "flakes" came together again they assumed a different shape, once looking like a tower.

As the witnesses watched this strange sight, other cloud-like objects appeared until there were 5 altogether—the first and last being larger, and the three intermediary ones being the smallest. All were of the same color, consistency and behavior. They grouped together, blossomed and broke up at the same spot and both the mass and the fragments moved about at small distances.

At one time the "flakes" lost color or disappeared, only to reappear shortly and to stick together again in one mass. The whole phenomenon lasted one hour and 10 minutes, after which the objects "disappeared" for good.

The witnesses stated emphatically that for the duration of the sighting, even when the clouds or flakes disappeared, they got the impression that there were real objects moving about.

We concur with Mrs. Granchi that this is a most important sighting even though no landing or occupants were involved, and will welcome any ideas from members or subscribers which might explain this sighting.

UFO Air Chase Over Tucson

A silvery, oval-shaped unidentified flying object was reportedly observed over Tucson, Arizona, on February 2, 1972. The observation was made by Mrs. Carol Kerstetter, a housewife, who was advised by her husband to report the incident to APRO.

The observation took place at about 1:30 p.m., local time, when Mrs. Kerstetter was watching three A7 combat aircraft flying nearby. The three aircraft, stationed at Davis-Monthan Air Force Base, Tucson, were climbing rapidly towards the north-west and veered around to the south-west. The aircraft approached a large, oval-shaped object, which appeared to be double the size of the A7s, one towards the right of it, one towards the left of it and one behind it. The UFO appeared to be moving very slowly and Mrs. Kerstetter observed it for approximately 20 seconds. The object and the A7s were situated about 30 degrees above the south-western horizon and Mrs. Kerstetter estimated the UFO, which she described as "silvery", to be one third the size of a quarter at arm's length.

As Mrs. Kerstetter watched the air-intercept, the object vanished. APRO questioned Mrs. Kerstetter very carefully on this point and she insists that she did not look away at any time as she was stunned by what she was watching and the object did not appear to depart - just to disappear. Mrs. Kerstetter admits that she may have blinked at the time, giving the object a split second in which to depart. After the object's disappearance, the A7s looped around town and presumably landed at Davis-Monthan.

Mrs. Kerstetter could give no other description other than "oval" and "silvery." She observed no structural details such as wings or windows although the object appeared to be *double* the size of the A7s, which she could easily identify as A7s are seen daily over Tucson.

APRO has received further, unofficial information on the incident, to the effect that the Base was alerted to the presence of a UFO through a radar track and three A7s were scrambled. After the return to the Base, the three pilots were debriefed extensively. The names of the pilots, even the incident itself is classified information, so further data may not be forthcoming for some time. If and when the Air Force report is declassified, it could be one of the strongest cases on record as it would involve ground radar, ground visual, air visual and probably air-radar (there is also the possibility of aerial photography using gun-cameras).

Argentinean UFOs

CODOVNI, the Argentinean UFO group has forwarded press information on recent sightings in Argentina. One case involves a sighting by an Argentinean Airlines crew flying an AVRO-748 between Catamarca and Buenos Aires. The crew consisted of Captain Cayetano Trigo, pilot (with 27 years flight experience), officer Alberto Parcampo, co-pilot (with 9 years flight experience), Steward

R. Servant and Stewardess Susana Lucarelli.

The observation occurred at about 11:00 p. m., local time, on February 8, 1972, while the aircraft was over San Nicolas and Ramallo. A large, bright light appeared before the plane and obstructed the crew's vision. The light reportedly left a blue and red trail and changed color from yellow to red, to blue, to green.

Few other details are given. The crew observed the phenomenon for about 5 minutes and believed it to be a "flying saucer" that was pacing their aircraft.

Other observers at the airport claimed also to have seen a UFO, before the AVRO landed. One of these was a pilot, Jorge Sosa. At the same time as the AVRO observation, dozens of citizens of Mar del Plato, over 200 miles south of Buenos Aires, called police and newspapers concerning the observation of at least 5 UFOs over the city. Some of the characteristics of the reported phenomenon were similar to a satellite re-entry (the Smithsonian Astrophysical Observatory-VFON Satellite Re-Entry listing does not indicate a re-entry for the first week of February, 1972) or a meteor. No explanation was given by authorities.

Also at 11:00 p. m. approximately, many citizens of Bahia Blanca, almost 400 miles to the south of Buenos Aires, reported the same or a similar phenomenon. Some reports state one object was observed. Other reports mention several objects. APRO does not possess enough data on these observations to offer an opinion.

Book Review

The Nature of Ball Lightning
by Stanley Singer
Plenum Press, New York, 1971
169 pages, \$12.50.

Over the centuries man has recorded, on rare occasions, mysterious balls of light that remain visible for a few seconds, or even minutes, and which generally appear in connection with thunder storms. This phenomenon has traditionally been called ball lightning. Its general characteristics were hinted at by Aristotle and other writers more than 2000 years ago. One sometimes hears the question 'Does ball lightning exist?' debated with vigor. This reminds me of a similar question asked about UFOs. In both cases we are only involved in semantics. Once you have defined a certain puzzling class of natural phenomena as 'ball lightning', then of course it exists.

In spite of fairly numerous references to the subject in the scientific literature very few monographs exist in this field,

(See Review-Page Eight)

Back Bulletins Available

APRO has a stock of back bulletins which are available to members and subscribers at 50 cents each, postpaid, as per the following list:

1958 — Jul., Nov.
 1959 — Mar., Jul.
 1960 — Mar., Jul., Sep., Nov.
 1961 — Jan., Mar., May, Jul., Sep., Nov.
 1962 — Jan., Mar., May, Jul., Sep., Nov.
 1963 — Jan., Mar., May, Jul., Sep., Nov.
 1964 — Jan., March.
 1967 — Nov.-Dec.
 1968 — Mar.-Apr., May-Jun., Jul.-Aug., Sep.-Oct., Nov.-Dec.
 1969 — Jan.-Feb., Mar.-Apr., May-Jun., Jul.-Aug.
 1970 — May-Jun., Nov.-Dec.
 1971 — Jan.-Feb., Mar.-Apr., May-Jun., Jul.-Aug., Sep.-Oct., Nov.-Dec.

When ordering, be sure to indicate exactly which bulletins are required. Send remittance for the correct amount and print name and address clearly.

BULLETIN RATES

APRO *Membership* including Bulletin:
 U.S., Canada & Mexico . . . \$6.00 yr.
 All other countries \$7.00 yr.
Subscription to Bulletin only:
 U.S. Canada & Mexico . . . \$6.00 yr.
 All other countries \$7.00 yr.

UFO Photos

We remind all members that the sale of UFO photos has been discontinued. Late orders received are being processed but new orders will be returned.

APRO will continue to publish reliable UFO photos that come to light from time to time.

APRO Symposium Proceedings

The proceedings of the APRO UFO Symposium, held at the University of Arizona last November 22nd and 23rd, are being transcribed and it is hoped that publication will be possible later in 1972. However, this will be dependent on the sale of the *Proceedings of the Eastern UFO Symposium*, which is available from APRO at \$3.00 postpaid in the U.S., Canada and Mexico (US \$3.50 in other countries).

We strongly urge *all* members to purchase a copy of the latter so that an investment may be made in the publication of the Tucson meeting, which was hailed by Dr. J. Allen Hynek as the "...first truly scientific symposium (on UFOs)..."

Review

(Continued from Page Seven)

the last comprehensive treatment having been published by W. Brand in 1923. All those interested in a study of aerial phenomena will welcome this new review, which is a valuable summary of reference material.

The author has organized the subject systematically. After a brief historical comment the general physical properties of normal lightning are noted briefly. The observational characteristics of ball lightning are then discussed, using as examples specific cases of visual evidence. A chapter dealing with photographs of ball lightning is interesting but adds little of scientific importance to the discussion as most of the photographic evidence is strongly suspect. This results from the fact that mounted cameras were almost never available on the rare occasions when ball lightning appeared, and there has been a very general misinterpretation of the pictures secured with hand-held equipment. The observational half of the book ends with a summary of the average characteristics of the phenomenon as determined from a grand total of some 1000 cases, most of these collected from the literature by previous writers.

The last half of this book is devoted to an extensive treatment of some dozen theories that have been advanced to explain ball lightning. Even the earlier, primitive theories are included as some of these have been independently suggested several times without knowledge of their past history. The author comes to the same conclusion as previous writers, that no theoretical treatment has yet been found that explains all the major characteristics of the phenomenon. I heartily agree with his suggestion that probably no one theory will be found adequate to cover all recorded events and that there may be a number of distinct types of ball lightning. At the present time a hopeful line of investigation seems to be that involving a plasmoid, generated by natural electromagnetic, high-frequency radiation. The quieter, less-energetic types of ball lightning may result from the diffuse combustion-oxidation of gases. Some of the rarer active types may originate in the vaporization of metal by ordinary lightning. These three explanations well illustrate the diversity of the theories proposed. A great deal more theoretical and experimental work is necessary before we really understand the subject.

The volume is well produced and very few misprints were noted, though there is a bit of confusion on page 30 where two separate cases have been mixed. I feel the author could have stressed the fallibility of observational data a bit more, though this would not alter his general conclusions. A very valuable feature is a

compilation of 594 references to ball lightning from the scientific literature. These are listed both by author and by subject classification. This book is practically indispensable to anyone involved in a serious study of strange things seen in our atmosphere.

Dr. Peter M. Millman,
 Astrophysics Branch,
 National Research Council of Canada,
 Ottawa, Ontario, Canada.

Graduate Work on UFOs

One of the out of state visitors to the APRO UFO Symposium was Mr. Paul McCarthy, a graduate student in Political Science at the University of Hawaii in Honolulu. Mr. McCarthy, who is working on a Ph.D. thesis on the federal and science policies on UFOs, spent almost two weeks in Tucson doing research. His visit followed that of David Jacobs several months before, who is writing a Ph.D. thesis on the history of UFO sightings, including the airships of the 19th Century.

APRO is aware of two other such academic studies on UFOs. One is a dissertation in Sociology by Michael Schutz at Northwestern University and the other a dissertation in Journalism by Herbert Strentz, also at Northwestern University (who completed it last year).

It is encouraging to see that UFOs are gradually becoming a subject of interest in the academic world. Several college courses involving UFO matters have been given and APRO is aware of others programed for 1972.

UFOs:

The Scientists' Dilemma

By Dr. Horace C. Dudley

Dr. Dudley is a Professor of Radiation Physics at the University of Illinois, Chicago, and is Consultant to APRO in Radiation Physics.

By following the reactions and changing attitudes of the general public over 25 years of ever-increasing reports of UFOs, one finds that most of those not scientifically trained are now at least ready to consider the probability of extraterrestrial visitors. This can readily be explained since those over 40 years of age remember well the Sunday comics and Buck Rogers' exploits. These past years we have seen those far-out exploits of the 1930's enacted on our T.V. screens as Armstrong and Aldrin made their

(See Dilemma-Page Nine)

Dilemma

(Continued from Page Eight)

historic landing on the Moon. These men were *our* first extraterrestrial voyagers. Non-technical minds are no longer stunned by thoughts of a civilization of reasoning beings who just might have stumbled on a practical application of a "Unified Field Theory" that our theoretical physicists here have been unsuccessfully wrestling with for the past 70 years.

From the vantage point of having seriously studied the history of physics for the past 15 years and for 7 years taught senior graduate level courses in the history of physics, the reactions of scientists in general and physicists in particular, to reports of UFOs are not new, nor surprising. History is simply being repeated. Well known is the reaction of the French Academy of Sciences (1803) to reports of meteorite showers striking areas of France in large numbers. These reports were derided because it impinged on the "scientific fact" that nothing could come from outer space. Not until members of the Academy went to certain areas in France and picked up meteorites by the score, did this august body even consider that such events could occur.

We have to go no further back than the 20th Century to illustrate how a well-publicized theory is still generally considered unshakable; namely, the General Theory of Relativity. Newton predicted in his *Principia* that light would be bent by gravitational attraction as it passed the Sun. Einstein calculated (1912-1915) the extent of such bending. In 1920 the Sun was shown to have a large magnetic field, now known to be often fluctuating, even reversing polarity. In 1960 the potential difference between the Earth's orbit and the Sun was shown to be $10^{17} - 10^{19}$ volts. The bending of light from a star, as it passes the Sun, is a resultant of three forces, and not limited to the effect of gravitational attraction. Both Newton and Einstein based their reasoning on the information available at the time, thus assuming that only one force was acting.

In 1964, Dicke of Princeton showed the Sun to be an off-centered spheroid, accounting for the annual changes (perturbations) in the orbit of Mercury. These experimental findings return astrophysics to the laws of classical mechanics, but as the present decade starts you will hear little of the above discussed by leaders of physics. Certainly none has filtered down to the college level texts.

These are examples of scientists caught up in the malaise of crisis where the anomalies observed cannot be fitted into the established modes of scientific theorizing; in other words, findings which do not fit into "Normal Science." This mal-

aise causes findings which cannot be readily explained to be shelved, awaiting further evidence, further supporting material; in effect this delays the day of reckoning, which eventually comes.

In his most interesting volume *Thirty Years That Shook Physics*¹ Gamov shows how the experimental findings of 1895-1930 required the marked revision of "classical" physics, introducing concepts which were in many ways diametrically opposite to those which formed the framework of physics prior to 1900.

Many of these findings were so new, so unexpected that new theories had to be developed. Most of the new concepts met with little opposition. The shock of the avalanche of new discoveries left the old timers stunned. The leaders of science could not cope with these young upstarts, the experimentalists: Becquerel, Roentgen, Rutherford, Thomson, the Curies, Michelson, Milliken, and others.

A young theorist, Max Planck, who flew in the face of the accepted theories of heat and light propagation stated:² "A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it."

The theories which developed out of the wealth of experimental findings during this era have now become the dogma of "Modern Physics" as shown by Kuhn in his *Structure of Scientific Revolutions*.³ The 1900-1930 era has now become "Normal Science" and "Normal Science" provides the framework and guidelines which channel research efforts to further support the basic assumptions of "Normal Science". In fact, "Normal Science" also provides the box into which new research must fit, else it may well be classed crackpot (The Kiss of Death).

It is this writer's thesis that we are again engaged in a second "Thirty Years That Will Shake Physics", beginning about 1955. Some experimental findings in basic physics which cannot be fitted into the current "Normal Science" are listed as follows:

- A. Breakdown of Parity.
- B. Breakdown of Time Reversal (which negates Lorentz transformation and concept of 2 frames of references).
- C. Neutrino flux as a continuum (a particulate aether).
- D. Astrophysical forces a resultant of electrostatic, magnetic, and gravitational fields.
- E. The Earth, a charged "particle" surrounded by an electrosphere (300,000 volts).

The above indicates some areas in which scientists, in particular the physical scientists, are being buffeted. This revolu-

tion will not be as easy as the 1900-1930 affair. Too many have too much at stake salary wise; reputation wise; status wise if you like. The history of physics indicates that the full impact of the experimental findings 1955-1970 outlined above will take about two generations exactly as did the fading out of the concept of heat as a substance (caloric). By 1800 all the experimental evidence was in, yet in 1870, some texts still retained caloric as a preferred theory over the mechanical nature of heat and the kinetic theory of gases.

Just now in addition to the sub-surface turmoil in the physical sciences there is added a problem of the assessment of reports of a series of unusual physical phenomena, and these phenomena do not fit into "Normal Science" any more than those outlined above in physics and astrophysics. So, attempt to understand the dilemma of the scientist as he reads about, hears about, even perhaps observes UFOs. He is beset by fears of loss of prestige and perhaps eventual loss of research funds. For the disposition of these rewards for years of patient study are determined by senior members of the profession who are perforce ultraconservative, not prone to look with favor on crackpot ideas, theories, or research proposals. Such is the dilemma of the scientist who is genuinely curious as to what is being observed by so many.

REFERENCES

1. George Gamov: *Thirty Years That Shook Physics*, 1966, Doubleday, Anchor Science Study Series.
2. Max Planck: *Scientific Autobiography*, Translation by F. Gaynor, 1949 (See PP. 33-34). Philosophical Library (N. Y.).
3. T. S. Kuhn: *The Structure of Scientific Revolutions*, Chicago University Press, 1962. (Vol. II, No. 2, International Encyclopedia of Unified Science).

OUR APOLOGIES
for the lateness
of this issue
an IBM typesetting machine
refused to work properly
and then,
the Editor became ill.

Newswires, newspapers, radio and television stations may quote up to 250 words from this publication, provided that the Aerial Phenomena Research Organization, Inc. (or APRO), Tucson, Arizona, is given as the source. Written permission of the Editor must be obtained for quotes in excess of 250 words.